

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1-33 (Canceled)

Claim 34 (Currently amended): An interconnection apparatus comprising:

a plurality of first substrates;

a plurality of free standing, elongate, resilient contact structures attached to said first substrates; and

a second substrate comprising:

a plurality of first terminals on a first side thereof,

a plurality of second terminals on a second side thereof, said second side opposite said first side, and

a plurality of interconnections through said second substrate electrically connecting ones of said first terminals with ones of said second terminals;

wherein said first substrates are attached to said second substrate, and ones of said contact structures are electrically connected to ones of said first terminals;

~~said plurality of contact structures is for contacting dice of a semiconductor wafer, and each said first substrate corresponds to one of (i) at least one of said dice or (ii) a portion of one of said dice and a portion of an adjacent die.~~

Claim 35 (Previously presented): The interconnection apparatus of claim 34, wherein said first terminals are disposed in a first pattern on said first side of said second substrate, and said second terminals are disposed in a second pattern on said second side of said second substrate, and wherein said first pattern is different than said second pattern.

Claim 36 (Previously presented): The interconnection apparatus of claim 35, wherein said first terminals in said first pattern are in a tighter pitch than said second terminals in said second pattern.

Claim 37 (Previously presented): The interconnection apparatus of claim 34 further comprising an electrical interface to a semiconductor tester, wherein ones of said second terminals are electrically connected to said interface.

Claim 38 (Previously presented): The interconnection apparatus of claim 37 further comprising a probe card, wherein said probe card comprises said interface.

Claims 39 and 40 (Canceled)

Claim 41 (Previously presented): The interconnection apparatus of claim 34, wherein each said first substrate corresponds to one of said dice.

Claim 42 (Previously presented): The interconnection apparatus of claim 34, wherein each said first substrate corresponds to a plurality of said dice.

Claim 43 (Previously presented): The interconnection apparatus of claim 34, wherein contact structures are attached to each said first substrate in a pattern that corresponds to a pattern of contacts on one of said dice.

Claim 44 (Previously presented): The interconnection apparatus of claim 34, wherein contact structures are attached to each said first substrate in a pattern that corresponds to a pattern of contacts on at least two of said dice.

Claim 45 (Previously presented): The interconnection apparatus of claim 34, wherein contact structures are attached to each said first substrate in a pattern that corresponds to a portion of one of said dice and a portion of an adjacent die.

Claim 46 (Previously presented): The interconnection apparatus of claim 34, wherein each of said contact structures comprises a wire.

Claim 47 (Previously presented): The interconnection apparatus of claim 46, wherein each of said contact structures further comprise an overcoat enveloping at least a portion of said wire.

Claims 48-91 (Canceled)

Claim 92 (New): The interconnection apparatus of claim 47, wherein said overcoat comprises a material having a greater yield strength than a material composing said wires.

Claim 93 (New): The interconnect apparatus of claim 34, wherein said contact structures are not encapsulated in an elastomer material.

Claim 94 (New): The interconnect apparatus of claim 34, wherein said contact structures are not encapsulated in an encapsulate common to more than one of said contact structures.

Claim 95 (New): The interconnect apparatus of claim 34, said plurality of contact structures is for contacting dice of a semiconductor wafer, and each said first substrate corresponds to one of (i) at least one of said dice or (ii) a portion of one of said dice and a portion of an adjacent die.

Claim 96 (New): The interconnect apparatus of claim 34, wherein each of said first substrates comprises third terminals on a first side of said first substrate, fourth terminals on a second, opposite side of said first substrate, and interconnections through said first substrate electrically connecting ones of said third terminals with ones of said fourth terminals.

Claim 97 (New): The interconnect apparatus of claim 96, wherein ones of said fourth terminals are connected to ones of said first terminals.

Claim 98 (New): The interconnect apparatus of claim 97, wherein each of said contact structures comprises a wire bonded to one of said third terminals.

Claim 99 (New): The interconnect apparatus of claim 98, wherein each of said contact structures further comprises an overcoat enveloping at least a portion of said wire.

Claim 100 (New): The interconnect apparatus of claim 99, wherein said overcoat comprises a material having a greater yield strength than a material composing said wires.

Claim 101 (New): The interconnect apparatus of claim 34, wherein said ones of said contact structures that are electrically connected to said ones of said first terminals are not attached directly to said ones of said first terminals.